In the Claims

1-65 (Cancelled)

66. (New) A fuel delivery system comprising:

a reciprocating coil assembly;

a pump chamber; and

a pump element configured to reciprocate with the reciprocating coil assembly such that fuel is drawn into and expelled from the pump chamber during a reciprocating cycle.

67. (New) The fuel delivery system of claim 66 further comprising a nozzle in fluid communication with the pump chamber to deliver fuel expelled from the pump chamber to a downstream engine component.

68. (New) The fuel delivery system of claim 67 wherein the downstream engine component includes one of a manifold, a fuel rail, and a combustion chamber.

69. (New) The fuel delivery system of claim 66 wherein the reciprocating coil assembly includes:

a core capable of conducting magnetic flux;

a pair of permanent magnets disposed adjacent the core;

a bobbin disposed about the core and configured to slide about the core; and

a coil wound within the bobbin.

70. (New) The fuel delivery system of claim 69 wherein the core is formed of ferromagnetic material.

71. (New) The fuel delivery system of claim 69 wherein the core is centrally disposed between the pair of permanent magnets and the bobbin is configured to slide longitudinally about the core.

72. (New) The fuel delivery system of claim 66 further comprising a reciprocating circuit coupled to the reciprocating coil assembly and including a storage capacitor and a plurality of switches, a first lead of the reciprocating coil assembly coupled to a voltage source, and a second lead of the reciprocating coil assembly coupled to the storage capacitor through at least one of the plurality of switches.

73. (New) The fuel delivery system of claim 66 wherein the pump element is further configured to cause pressure variations in the pump chamber during reciprocal movement to draw fuel and express fuel from the pump chamber.

74. (New) The fuel delivery system of claim 66 further comprising an injector controller configured to regulate current through the reciprocating coil assembly to control reciprocal movement of the coil assembly.

75. (New) The fuel delivery system of claim 74 wherein the controller is further configured to control reciprocal movement of the coil assembly by alternating a polarity of control signals transmitted to the reciprocating coil assembly.

76. (New) A pump comprising:

a housing;

a dual polarity magnet stationarily disposed within the housing;

a coil assembly reciprocally disposed within the housing and positioned adjacent to the dual polarity magnet such that, upon introduction of a varying electrical charge, the coil assembly is caused to reciprocate; and

a poppet disposed within the housing and displaced from a seated position to an injection position by the reciprocation of the coil assembly.

77. (New) The pump of claim 76 further comprising:

a drive member integrally connected to the coil assembly such that the drive member is caused to reciprocate with the coil assembly; and

a valve member disposed within the housing such that the valve member is displaced by the reciprocation of the drive member thereby pressurizing a fluid volume such that a predetermined quantity of the fluid volume is displaced from the housing when the poppet is displaced from the seated position.

78. (New) The pump of claim 77 further comprising at least one valve actuated by pressure variations in the fluid volume wherein fluid is drawn into the fluid volume after the predetermined quantity of the fluid volume is displaced from the housing.

79. (New) The pump of claim 77 further comprising a nozzle configured to direct the predetermined quantity of the fluid volume displaced from the housing.

80. (New) The pump of claim 76 further comprising a circuit comprising a voltage source and capacitor selectively coupled to the coil assembly to effectuate the introduction of the varying electrical charge to the coil assembly.

81. (New) The pump of claim 80 wherein the coil assembly is independently coupled to the voltage source and capacitor.

82. (New) The pump of claim 76 wherein the dual polarity magnet is disposed centrally within the housing and wherein the coil assembly is disposed radially within the housing around at least a portion of the dual polarity magnet.

83. (New) A method of pumping comprising:

energizing a coil assembly disposed within a housing and connected to a poppet such that the coil assembly is attracted to a first polarity magnet fixedly disposed within the housing to unseat the poppet and displace a predetermined quantity of liquid; and

de-energizing the coil assembly such that the coil assembly is attracted to a second polarity magnet fixedly disposed within the housing and returning the poppet to a seated position.

84. (New) The method of claim 83 further comprising switchably connecting an energy storage circuit to the coil assembly to de-energize the coil assembly.

85. (New) The method of claim 84 further comprising re-energizing the coil assembly from the energy stored in the energy storage circuit.